

ABSTRACT

ANTICOLLISION EQUIPMENT ONBOARD AN AEROPLANE WITH NORMAL FLIGHT REVERSION AID

Conventional terrain anticollision equipment formulates, around the short term forecast trajectory of the aircraft (A) which is equipped therewith, virtual volumes of protection of maneuver charted by feelers (W, C) and signals a risk of terrain collision as soon as it detects an intrusion of the terrain (R) into these virtual volumes of protection of maneuver. The terrain anticollision equipment proposed provides the crew with, in addition to the prealarms and alarms of risk of terrain collision, an indication of possibility of cessation of an avoidance maneuver instigated in order to resolve a risk of terrain collision, in the form either of a stoppage of an aural and/or luminous cue to continue the avoidance maneuver (such as "continue climb"), or of the momentary generation of an aural and/or luminous cue of possible end of the avoidance maneuver (such as "resume normal flight"), formulated by means of a feeler (L) specific to route resumption, the absence of contact of the terrain with this feeler (L) specific to route resumption being used to note the definitive resolution of a risk of terrain collision.

Fig. 3

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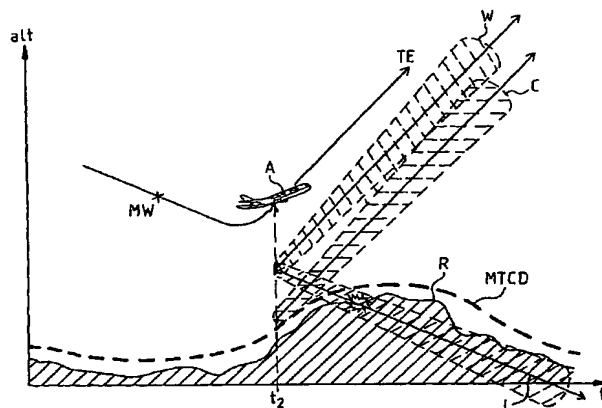
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(54) Titre : EQUIPEMENT ANTICOLLISION TERRAIN EMBARQUE A BORD D'AERONEF AVEC AIDE AU RETOUR EN VOL NORMAL



(57) Abstract: The invention concerns a standard terrain anticollision equipment which develops, around the short-term trajectory predicted for the aeroplane (A) which is equipped therewith, virtual protection volumes located by sensors (W, C) and signals a terrain collision risk when it detects a terrain intrusion (R) in said protective virtual operating volumes. The inventive terrain anticollision equipment provides the crew, additionally to early warnings and warnings of terrain collision risk, with an indication of the possibility of the stoppage of an evasive action initiated to overcome a terrain collision risk, in the form, either of a stoppage of an audio and/or visual instruction of the continuation of the evasive action (such as proceed with climb), or the temporary generation of an audio and/or visual instruction of the possible ending of the evasive action (such as back to normal flight), produced by a sensor (L) specific to route resumption, the absence of terrain contact with said route-resumption-specific sensor (L) is used to ascertain definitive resolution of the terrain collision risk.

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